

SPLIT-2

Work Order ID 57850 - 2

April 19, 2010 11:10:41 AM

Page 1

Item ID: D2244-116

Accept

Revision ID:

Item Name: Step Extrusion

Setup Start

Stop

Start Date: 4/19/10

Start Qty: 86.00

Cust Item ID:

Required Date: 5/05/10

Req'd Qty: 86.00

Customer:

Reference:

Approvals:

Process Plan:

CL

Date: 10/4/19

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2244

Rev D1

100

0.00



Purchasing

Purchasing

PURCHASING

Memo

0.00

Issue P/O: 11694 (a) Extrude as per Dwg D2244 (b) Material: 6061-T6 (QQ-A-200/8) (c) Minimum yield tensile strength = 35 ksi (d) Minimum ultimate tensile strength = 38 ksi (e) Minimum elongation = 8% (f) Order at 116" long (g) Caradon Indalex Tool # M



CL 10/4/19 86

110

0.00



Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.00

Ensure certification are attached

CL 10/5/18 (5)
10/4/21 55

120

0.00



QC

Quality Control

QC6- Inspect dimensions to drawing

Memo

0.00

Check Pull test per Dwg D2244 for compliance page attached. Check hardness with Webster tester

Solo/b

counter
(XSS)

Work Order ID 57850

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Page 2

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Process Plan:

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Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Packaging

Packaging

Identify as per dwg & Stock Location: *WA*

0.00

Memo

0.00

SAD

10-05-25

(53)
counted

140



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/05/25

POSITIVE RECALL

EFFECTIVE *120517* AUTH *u*

EASED *u* DATE *10-05-18*

Picklist Print

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Page 1

Work Order ID: 57850



Parent Item: D2244-116



Parent Item Name: Step Extrusion



Start Date: 4/19/10

Required Date: 5/05/10

Comments: IPP: A 24.03.04 New Issue: KJ

Start Qty: 86.00

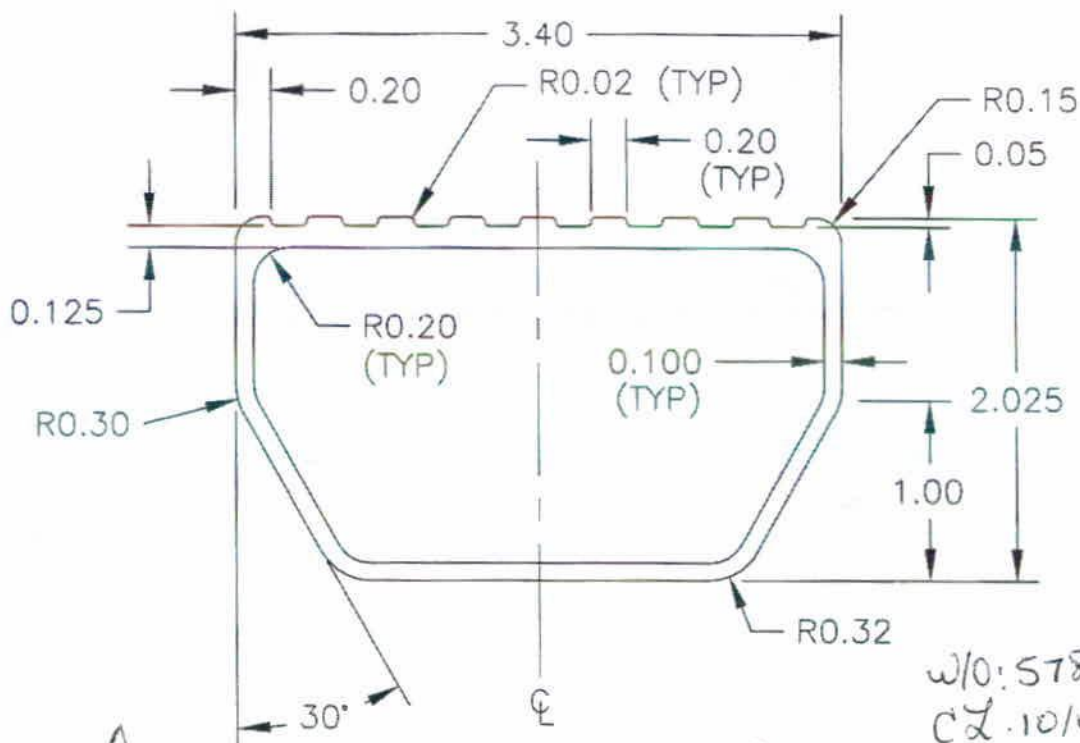
Required Qty: 86.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2244-116P  Step Extrusion		Purchased	No			110	Each	0.0000	86.0000 			

CY 10/5/18 (6)
10/10/21 55

DART

DESIGN BW	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2244	REV. D SHEET 1 OF 1
DATE 98.11.18		TITLE STEP EXTRUSION	SCALE 1:1
A	94.07.05	NEW ISSUE	
B	94.07.11	REDESIGNED	
C	94.08.08	REDESIGNED	
D	98.11.18	REMOVED 6005A MATERIAL INCORPORATED DEO 9081	
DI	01.04.17	ADDED DIE # <i># 40</i>	

RELEASED
18.11.25 *KE*

DI MANUFACTURED USING CARBON INDALEX DIE # MH-18865

PART NUMBER D2244-XX.X
XX.X IS CUT LENGTH IN INCHES

MATERIAL: 6061-T6 (QQ-A-200/8)

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
MINIMUM ELONGATION = 8%

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

325 rue Avro
Pointe-Claire, QC, Canada, H9R 5W3
Téléphone (514) 697-5120
Fac-simile (514) 694-8310

sapa:

Rapport des propriétés mécaniques Mechanical Properties Test Report

Client / Customer : **DART AEROSPACE LTD**

Adresse / Address : **270 ABERDEEN STREET
HAWKESBURY ONT,
K6A 1K7**

commande Sapa / Sapa order # : **50399**

bon de commande / Purchase order # : **11694**

de matrice / Die # : **MH 18865**

Description : **Step Extrusion**

Alliage & trempage / Alloy & temper : **6061 T6**

Customer Part # : **D2244**

Contrôle / Control # : **19642-1**

Coulée / Cast # : **48341**

	Min.requis Min.required	Résultat actuel Actual results
Tension ultime Ultimate stress (psi)	38 000	43471
Contrainte élastique Yield stress (psi)	35 000	40290
% élongation dans 2" % elongation in 2"	8	12
Dureté Rockwell E (hre) Rockwell E Hardness (hre)	88 @ 100	95

Composition chimique typique / Typical chemical composition :

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6063	0,20 - 0,60	0,35 Max	0,10 Max	0,10 Max	0,45 - 0,90	0,10 Max	0,10 Max	0,10 Max
6005	0,60 - 0,90	0,35 Max	0,10 Max	0,10 Max	0,40 - 0,60	0,10 Max	0,10 Max	0,10 Max
6005A	0,68 - 0,72	0,15 - 0,27	0,08 - 0,12	0,20 - 0,24	0,48 - 0,52	0,03 Max	0,05 Max	0,03 Max
6061	0,40 - 0,80	0,70 Max	0,15 - 0,40	0,15 Max	0,80 - 1,20	0,04 - 0,35	0,25 Max	0,15 Max
6351	0,7 - 1,3	0,5 Max	0,10 Max	0,40 - 0,80	0,40 - 0,80	—	0,20 Max	0,20 Max

Nous certifions que le matériel fourni rencontre les exigences chimiques telles qu'annoncées par la norme ASTM B-221 excepté pour la section 8.2 (nombre de spécimen) et AMS QQA 200/8 excepté pour la section 4.2.3.1 (nombre de spécimen) qui sont déterminés par les exigences du client.

We hereby certify that the material supplied meets the chemical properties as published by the ASTM B-221 except for section 8.2 (number of specimen) and AMS QQA 200/8 except for section 4.2.3.1 (number of specimen) which is determined by customer requirement.

Sincèrement vôtre,
Yours truly,

date : **2010-05-18**



Bruno Morency
Superviseur qualité
Quality supervisor



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO11694

Purchase Order Date 4/19/10

PO Print Date 4/19/10

Page Number 1 of 1

Order From :

VC-IND006

INDALEX LIMITEE
325 RUE AVRO
POINTE-CLAIRE, QC H9R 5W3
CA

Contact Name

Vendor Phone 514 697 5120

Vendor Fax 514 694 8310

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FAXED
04/19/10

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D2244-116P	Step Extrusion	5/05/10 Yes	86.00 Each	Yours ppd	\$27.6200	\$2,375.32

04/10/10

Rec'd le pas

Special Inst:

EXTRUDE AS PER DWG D2244 REV.D
MATERIAL: 6061-T6 AS PER QQ-A-200/8
MINIMUM YIELD TENSILE STRENGTH
= 35KSI
MINIMUM ULTIMATE TENSILE
STRENGTH = 38 KSI
MINIMUM ELONGATION = 8%
116" LONG
CARADON INDELEX TOOL # MH-18865
B57850

New 55

04/10/10

PO Total:

\$2,375.32

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 4/19/10

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

PROFILS D'ALUMINIUM - ANODISATION - PEINTURE
ALUMINUM EXTRUSIONS - ANODIZING - PAINTING

Sapa Inc.
Adresse: 1001, 32e rue 2000
Rue St. Jean, Québec, PQ H2V 1A3
Téléphone: 514 397-1111
Télécopieur: 514 397-1111

sapa:

Vendeur / Seller to:

Client / Client to:

Numéro de commande / Order number

P/V: 1001
NOTRE NUMÉRO DE COMPT.
OUR ORDERING

BARB AEROSPACE LTD

1270 AUBURN

MARKHAM, ONT

K6A1K7

CERTIFIÉ
ISO 9001:2008

CUSTOMER

Received Date:

11694

51

X

10/3

1 500

DATE ONLY
DUE 2010/5/21 MYIRU

EXTRUSION

BUNDLE 920720 920725

00

2

31 58 points en haut

chemical properties... Quality procedures

Robert L. Lacroix au

EXEMPLAIRE DE LA COMPTABILITÉ
ACCOUNTING COPY

FEUILLE D'EMPAQUETAGE
PACKING SLIP